

BIG TELEPHONE UNDERTAKING.

British Government Proposes to Drive a Monopoly Out of Business.

London is getting ready for a big fight, and thirty miles of street are torn up for the conflict, which a little army of a thousand men is bringing on as rapidly as possible. In all probability no blood will be shed, but a heap of gold is at stake.

After the struggle is over we shall know more than we do now about the vexed question as to whether it profits a people to run their own telephone. Incidentally, the contest will put a large sum of money into American pockets, for it is brought in an American company the largest telephone contract ever given in Europe.

The strange feature of the fight is that it will be a struggle for trade between the British government, and some of its own most respected citizens who form the National Telephone Company. Some of the company's directors and some of the stockholders are peers of the realm. But the government is going to crowd them out of business if it can, and parliament has granted £10,000,000 with which to begin the new competition.

The National Telephone Company is the biggest thing of its kind in England. It is practically a monopoly, rich and powerful. It has given a phenomenally bad telephone service to London. Consequently fewer telephones per capita are in use in the world's metropolis than in any American city of 50,000 inhabitants. Complaints were ineffective until suddenly a bill popped up in parliament authorizing the postoffice department to establish a rival service. The telephone people in the house of commons were howled over, and now, before London folk fairly realize it, the postoffice is laying its wire in mile after mile of streets, and the existing monopoly is preparing to battle for its life.

The contract for the enormous quantity of electrical apparatus required by the government was awarded to the Western Electric Company of Chicago. For the central exchange alone 15,000 telephones will be required, while many more instruments are being made for the suburban districts. No single factory could hope to have all the work done on time, and so the apparatus is being made in the shops of the Western Electric Company in three cities simultaneously. The boards and their attachments in Chicago, the cables in North Weymouth and the telephones in Antwerp.

At the postoffice they estimate that the whole district of 440 square miles cannot be completed for five years, but some of the new telephones will probably be in use in about two years. The man in charge of the whole vast operation is John Gaver, assistant chief engineer of the postoffice, and under him the work is being handled by three separate forces—the contractors will lay the wires, which are all on the American pattern; the Western Electric Company will equip the center from cellar to garret and lay the wires to the street, and the postoffice force will take up the wires there and lay the wires and cables.

The postoffice will give a much cheaper service than the National Telephone Company has given. The present price for unlimited use of a telephone is £17 (about \$35) a year, while the postoffice telephones are expected to rent for less than £10. The toll system will be in use in many of the shops modeled on the Swiss plan. By this the tradesman will pay \$15,

any to the postoffice for the telephone, then charge more four cents and divide the proceeds with the government.

At present the great digging operations are following the basin of the Thames pretty closely, for naturally the crowded business section of London will be provided with its new telephone first of all. The postoffice people drew a two-mile circle around St. Paul's cathedral and proceeded to survey it. To do that they had to explore every street, court, and alley in all that great section, a job that took a little over nineteen months. Then they began digging.

Underground London is already such a vast network of various "plants" old and new, that it has been no easy task to find a place in every street where the telephone wires could be laid. Perhaps the contractors had their pleasantest time in Chesham, where in digging they found a curious system of hollowed tree trunks through which one hundred and fifty or more years ago a part of London got its water supply. The trunks were black with age, but most of them sound as a nut, and were promptly pounced upon by Londoners eager for souvenirs.

The new experiment in paternalism will make the British postmaster general more nearly than ever the father of his people. The responsibilities of his department are already astonishing. Aside from his regular postal business of handling two billion letters a year, he runs the entire telegraph system of the country, conducts the biggest savings bank in the world,

insures lives, deals in government bonds, manages a messenger service, and spends \$25,000,000 a year in salaries alone. His telephone monopoly is run at a net loss of about half a million dollars a year, on an average, but the loss is due largely to the sums spent in extending the service; the

involve the postoffice the commission to compromise and an assurance should be given of the probable action of the commission if an offer is made, but when the individual is ignorant of such a process of law and desires to study the appeal the necessity in the matter to give him suitable instructions. It is not to be understood that anything contained in this circular has any statement of the



JOHN GAVER.
(Assistant Chief Engineer of British Postoffice Department.)



CENTRAL OFFICE OF THE GOVERNMENT TELEPHONE SYSTEM.

efforts on the part of officers necessary to the protection of the interests of the government, the collection of taxes, or the vigorous prosecution of willful violators of law is to be permitted, and it must be understood that this office still must tolerate practices which are manifestly inconsistent with the law and the dignity and welfare of the public service. Written condemnations and admonitions of violators of law secured under duress by internal revenue officers, and offers of compromise obtained by solicitation or threats, will be held by this office to be void, and officers who are instrumental or concerned in securing such concessions and offers of compromise by the means indicated will be held to have violated the regulations of this office and will be dealt with accordingly.

SHOPPING FOR STORES.

Line of Work at Which Some Women Make Good Commissions.

A few women in large cities succeed in earning a good living and frequently something besides by shopping for the retail dry-goods houses in the vicinity of their homes. Almost every big establishment has one—sometimes more than one—of these shoppers, who are really detectives in their way. The shopper is provided with handsome gloves and hats by the firm employing her, so that she may have the appearance of a customer who would be apt to buy largely. Her duties are to make a daily tour of rival establishments, ascertaining the novelties in stock and the price, and especially to become cognizant of all bargain sales and reductions in the different departments.

The danger in the work of the shopper lies in her probable detection. Once she becomes known, clerks and floor-walkers are combined against her and her usefulness is done. She is treated with scant courtesy and the salespeople are instructed to deny her information and to refuse to show goods. She is frozen out and must seek other fields. One of the cleverest and most successful of these shoppers is absolutely unsuspected. She travels in a brougham and purchases largely, being to all intents and purposes a legitimate and desirable customer. She keeps rigid watch on the different stores and enables her own house to underbid the firm's rivals at all times. Having ingratiated herself with some of the salespeople, she even receives information a week ahead sometimes of contemplated sales, and on the same day her firm will make a similar reduction.

NO SWEAT BOXES.

In the Internal Revenue Service of Uncle Sam.

Sweat boxes are not popular in the internal revenue branch of the treasury department. A recent circular from this bureau says: It has come to the knowledge of this office that in some instances writs of habeas corpus of violators of law are secured from accused persons under duress, while in other instances delinquents are induced by solicitation or by threats to make an offer in compromise under a section of the revised statutes, which authorizes the commissioner of internal revenue, with the advice and consent of the secretary of the treasury, to compromise civil and criminal cases arising under internal revenue laws. Neither the ends of justice nor the statutes call for such proceedings. They are wholly unwarranted by law and the regulations of this office, and must cease at once. A treasury decision says: "No solicitation of an offer should be made and no delinquent should be induced by threats to

actual receipts are increasing rapidly, despite the fact that a telegram of twelve words costs the sender only twelve cents.

If he manages his new telephone business as well as he does the telegraphs, London will get a service at cheap rates that may tempt American cities to try the experiment, too, the experience of Stockholm to the contrary notwithstanding.

The present postmaster general is the rich and powerful Marquis of Londonderry, one of the great coal mine owners of England. He was put into the place at the beginning of the Transvaal war.

Use for the Earth Wheel.
Peter's big wheel as a locomotive round house for some enterprising railroad company is the latest novel purpose proposed for the disposition of that piece of gigantic machinery. The originator of the idea would have it laid on its side, roofed over in regulation round house fashion, and yet keep it to its business of turning, thus receiving seventy-two locomotives, if necessary, from one single track leading to its periphery. Frags, turn-tables, and switches would be done away with—Chicago Tribune.

An Unhallowed Parish.
There is a London parish which, though its electoral list must always be duly signed, does not contain a single inhabitant. This is the ancient parish of St. Christopher-in-Stock, which extends over the open space in front of the Mansion House and the Royal Exchange, and includes the corner of the Bank of England. Genealogists have traced since the parish was anything more than the shadow of a name.

AROUND THE CAMPFIRE



Defenses of Paris.

Perhaps you have just returned from Paris, enthusiastic over the sights there. Here are some of the things you didn't see. Below great forts about the city, eight miles away from its walls. Nineteen smaller forts, four miles out, each containing three acres and mounting two 50-ton guns. Great stacks of 100-pound mortar shells, ready for these guns to hurl. Twenty-one miles of continuous fortifications about the lower northwest walls 150 feet thick at the base and fringed by 45-foot mounds. Three hundred emplacements along this giant wall for as many 50-ton cannon, kept free from rust in the Champs de Mars arsenal, and ready to be swung into place as any time. So cleverly are the forts masked by long slopes of green turf, and the walls by tree-and-bush cover, that one can look in and out of Paris a dozen times and see scarcely a trace of its famous fortifications. The range of the 50-ton guns is over ten miles—some say fourteen. Beneath their, at present, untroubled beds on the rampart are stone casemates for ammunition, with small transfer wagons. These casemates open upon the inner base of the wall, and a set of rails, standard gauge, runs from the doorway to the top of the fortification. You must look for these rails in the grass, the general shaft is so modest. Suppose war comes and the 300 guns must be mounted. Well, the staff has thought of that. The rails—standard gauge—run ready for the ammunition wagons can be hooked with the tramway system of Paris. To work these guns, were every man of the garrison drafted away, Paris has 50,000 trained artillerymen among her reserves. She could man every gun twice over, garrison all her forts with infantry reserves, and put a dozen cavalry regiments into the field for scouting purposes. Every reserve, whether Parisian born or provincial immigrant, has a book containing his number, particulars of his service, and a memorandum of the harness to which he must repair upon the calling of the reserve. In case of war lines carefully maintained, and he is switched into use, and the tramway system would be in communication with the enormous goods depots of the Paris terminus. Not nothing stock only, but horse-drawn would be requisitioned. Every horse over four years old is registered, together with his type, owner, and probable utility. The general staff could choose from some 120,000 horses.

The military stores of Paris are boundless. In a day she could clothe and arm 400,000 fighting men, with 70,000,000 rounds of metallic cartridges. At the army bakeries she reserves large stores of grain. In case of siege the general staff has a warehouse of provisions ready in the Paris municipality, which at all times feeds the poor of bread and would do so of other staples. Paris has an inviolable defense—the submarine boats that patrol the Seine from Asnières and Ivry—Boston Post.

Dogs of War.
The dog world is destined to play an important part in future warfare. The German army is now provided with a large number of four-footed soldiers. The greatest gains are taken to train the animal, and its usefulness was quite established at last year's maneuvers near Calais. It is employed in three ways. Its intelligence and keen scent are utilized for discovering wounded men. The St. Bernard would naturally be chosen for Samaritan duties of this kind, but the object is to choose smaller dogs, which are less likely to be shot. During the maneuvers 200 soldiers were ordered to fall wounded in different parts of a forest. Five hundred ambulance officers were instructed to find them. 800,000 more than one-half the total force of all U. S. property in Boston, including the forts in the harbor. This was exclusive of the machinery and the buildings since erected. The naval valuation of the yard before any of the present improvements started was more than \$12,000,000, the second highest of any yard. The Argus was the first ship fitted up at the yard; the next ship in this line was the repairing of the famous Chesapeake, which was soon after captured on Lawrence's death. The first ship built was the ship-of-war Profile, which was captured in 1814 by the British, after a most successful though brief career. The next was the 74-gun battle ship Independence, launched in 1814, and still in service as the receiving ship at Mare Island, California. The Cumberland, the Merrimack, the Hartford, the Minnesota, were among the more famous of the old wooden ships built at the yard while the double turboted Monitor Moundschke, rebuilt and now at Manila, and the single turboted monitors Nahant, Nantuxet and Canopus were iron ships built there. The last ship launched at the yard was the Vendella, in 1912. The commandants of the yard have all been from Maine, and included Hall, Bultrick, Downes, Parker, Parrott, Stillingham, Hudson, Rodgers, Redman, Spies, Kimberly, Pyke, Mowbray and the present com-

mandant, William T. Sampson. In all 23 commodore have commanded at the yard.

Ships of War.

It is urged in the annual report of Major General John H. Brooke, commanding the department of the coast, at New York, which was made public at the war department recently, that a pressing necessity exists for the reorganization of the army on modern lines. He says:

For many years past the general officers of the army have shown the necessity for an increase which will place the army on an efficient basis and enable it to perform its duties with credit to itself and to the satisfaction of the nation. The events since the commencement of the Spanish war have demonstrated beyond doubt the necessity for a reorganization which will enable this nation to maintain the position in which it now finds itself placed, so that, in case of war, the army may form the bulwark behind which the volunteer army may be created, as has always been done in our country, in organizing the people.

Ships of War.
To ships of war, that ride the waves, And strike with quiver of steel, Your course quiver south the curb, But heed the iron heel. You bear our hearts and hopes abroad, Across the shoreless sea, While, stern-defying, on your prow stands thundering Victory!

What though the eastern sky be black With death for those that rove, Though darkness of the damned ingulfs Palm and palmetto grove, Your fleet flash along the shore, Your searchlights flood the bay, And Liberty can steer where Your great guns blaze the way.

When your trackless paths prove lonely, And friends are far and few, Or in all the waste of waters, None but the Lord can save you. To Him who shields and saves us all, Prayers rise from maid and man, For you bear the nation's banner, You are the nation's van.

Advance, ye storied Ships of War, Dispel the doubts and fears! Your locusts hold a precious freight, The fates of future years, High o'er your conquering conning towers.

The pennants fly unfurled; The Stars and Stripes above you are The home hope of the world—James Eugene Farmer, in the Outlook.

A Great Navy Yard.
The oldest structure in Charleston navy yard is the long white brick building at the main entrance, the location of many offices and the naval museum and library. The next oldest in the present commandant's residence. The land and buildings at the yard were assessed a few years ago by the Union assessors at nearly \$7,120,000. Twelve escaped their search, but these were all assessed out by four dogs, which, on a repetition of the experiment, saved eighteen who would otherwise have had no help. The dogs are provided with a little box full of refreshments and a packet of bandages. They are trained to wait till the wounded man has used these, and if he is too ill to do so to run back and fetch an ambulance officer. The other services for which the dogs are trained are as sentinels and scouts, and, more important still, as ammunition-carriers between the wagon and the firing line. It appears that the German troops sent out to China took with them a number of these faithful and well-trained recruits—London News.

The Automobile in War.
A recent application to our war department for experiments with military automobiles was answered with a prompt refusal on the ground that they appear to be a pocket of hand-arms abroad, where France and Germany are experimenting with them. The question has been in the hands of a technical commission since October, 1917, and eight automobiles were tested in Germany during the grand maneuvers of 1909 and the German emperor has offered a prize of £5,000 for the best utility car automobile. In Italy after trial, a number of automobiles have been assigned to the army for the transportation of baggage, Austria uses the Daimler, Automobiles are used for army transportation, carrying a load of 11,000 pounds on a slope of 1 in 10 at the rate of from three to seven miles an hour. Belgium is having one of its army wagons for the transportation of supplies transformed into an automobile. The new wagon weighs 4,000 pounds and its maximum speed is ten miles an hour.

Admiral Keeps Systematic Records.
Admiral Bradburn, who is at present chief of the Bureau of Equipment and Supplies in the navy department, is known as a man of system. In his private office he has hanging on the wall a bulletin showing the exact amount of coal available for purchase by the navy at the different ports throughout the world.



THE MARQUIS OF LONDONDERRY.

(British Postmaster-General at the Head of the Radical Movement.)